

Drag Nasty Creek TMDL Implementation Plan

Drag Nasty Creek is approximately 8 miles long from its headwaters near Highway 82 in Quitman County to its discharge point into Walter F. George Reservoir in Clay County. The watershed area for Drag Nasty Creek is relatively small - approximately 1 3/4 miles wide by 8 miles long. Drag Nasty Creek is classified as a "Fishing" use for water quality purposes and 1990/91 data shows the creek is only partially supporting its designated use. As a result, a TMDL (Total Maximum Daily Load) Implementation Plan must be prepared for Drag Nasty Creek.

An advisory committee comprised of local interests from both Quitman and Clay Counties and professional staff of various agencies was assembled to complete the TMDL Implementation Plan. This document is a product of the committee.

General Land Use in the Watershed

Quitman and Clay Counties are largely rural counties, especially in the vicinity of Drag Nasty Creek. Land uses in the watershed consist primarily of agricultural (crops and cattle) and forestry uses with some scattered residential uses. Residential development is served by individual septic systems. However, some of the older residential units do not utilize a sewage disposal system.

Land Use Changes Since the Monitoring Data was Collected

There have been significant land use changes in the watershed since the data placing Drag Nasty Creek on the 303(d) list was collected in 1990/91. Until 1995, a hog farm was operated adjacent to the creek, slightly upstream from the sampling site (Highway 39 bridge). There is also less farming and cattle ranching occurring in the watershed. In addition, cattle are now fenced away from the creek and alternative watering sites have been provided to livestock. A 100-300 foot forested buffer along most of Drag Nasty Creek has also been provided in recent years.

These land use changes are significant and additional monitoring is warranted to see if Drag Nasty Creek still exceeds fecal coliform limits.

Monitoring

The data used to place Drag Nasty Creek on the 303(d) list was collected in 1990/91. The age of the data is of concern to the advisory committee because of the significant land use changes (discussed above) that have taken place in the watershed. The data was collected once or twice a month for a year (16 samples). Fecal coliform exceeded allowable levels in eleven samples; however, in six of those samples the limit was exceeded by only 30-40 coliform units.

A water sample was pulled from Drag Nasty Creek by the Quitman County Health Department on February 26, 2001 at the same site samples were pulled during the 1990/91 monitoring. The

City of Cuthbert's Waste Water Treatment Plant Laboratory analyzed the 100 ml sample and found it contained a fecal coliform count 175 ppm. This level is far below the 1,000 ppm limit established for November through April and is also below the limit of 200 ppm established for May through October.

The consensus of the advisory committee is that additional monitoring needs to be done to ensure that Drag Nasty Creek should still be listed on the 303(d) list. If additional monitoring shows that fecal coliform limits are being exceeded, the creek must be monitored at more than one point along its entire stretch to be able to better pinpoint from where the pollution concerns are originating.

Existing Regulatory and Voluntary Actions

- The Chattahoochee River Basin Management Plan has been completed by the Georgia Department of Natural Resources, Environmental Protection Division.
- Quitman County has adopted a Wetland Protection Ordinance, Ground Water Recharge Area Ordinance, and Soil Erosion and Sedimentation Control Ordinance.
- Clay County has adopted a River Corridor Protection Ordinance and will adopt a Wetland Protection Ordinance and Ground Water Recharge Area Ordinance by October, 2005.
- A 100-300 foot wide forested buffer has been provided along almost the entire length of Drag Nasty Creek.
- A hog farm that operated immediately adjacent to Drag Nasty Creek, slightly upstream from the sampling site, stopped operating in 1995.
- Cattle have been fenced away from the creek and no longer have access to the creek. Alternative watering sites have been provided for livestock.
- Public awareness regarding environmental issues has increased tremendously. People pollute less and farmers have fenced livestock away from the creek.

Potential Fecal Coliform Loading Sources

If additional monitoring shows fecal coliform limits are being exceeded, the advisory committee has identified the following potential sources of fecal coliform pollution within the watershed:

- Wild hogs in the creek (hundreds of wild hogs exist in the two counties)
- Wildlife
- Improperly functioning septic systems/residential units lacking a sanitary system (although a preliminary "quick check" by the Health Department did not uncover any obvious problems in the watershed)
- People dumping deer carcasses into creeks during hunting season

Potential Actions that could Reduce the Fecal Coliform Load

- The wild hog problem must be addressed, not only for water quality issues. Methods by which to legally hunt wild hogs using bait from May through August must be investigated.
- If additional monitoring shows fecal coliform limits are being exceeded and agricultural uses are determined to be a contributor, implement appropriate Agricultural BMPs.

- Implement measures to ensure the buffer currently in place along the creek is not significantly disturbed. Agricultural/Forestry BMPs should be followed.
- Implement a program to identify improperly functioning septic systems and fix them.
- Implement a program to ensure all residential units have a sewage disposal system.
- Implement a public education program to educate people on the importance of disposing of waste in an acceptable manner. Emphasize the problems created when deer carcasses are dumped into water bodies.

Funding

The advisory committee recommends that if additional monitoring concludes that fecal coliform levels are still a concern in Drag Nasty Creek, then the potential actions identified above should be implemented on a voluntary basis and their effectiveness gauged through monitoring. Funding mechanisms to assist landowners with the costs of implementing potential measures must be made available.

Funding must be made available for additional monitoring to determine if fecal coliform is still a concern in Drag Nasty Creek. If additional monitoring determines that fecal coliform limits are being exceeded, funding for on-going monitoring at several points adjacent to the creek must be made available. Inadequate monitoring will be a liability in attempting to meet the TMDL goal.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: Flat Shoals Creek
(STREAM)Fecal coliform
(PARAMETER)RIVER BASIN: Chattahoochee
PLAN DATE: March 31, 2001

Prepared by: Chattahoochee-Flint Regional Development Center Address: 13273 GA Hwy 34 E, P.O. Box 1600 City: Franklin State: GA Zip: 30217-1600 e-mail: Inicholas@cfrdc.org Date Submitted to EPD: 03-29-01		Or Prepared By: Address: _____ City: _____ State: _____ Zip: _____ e-mail: _____ Date Submitted to EPD: _____					
General Information Obtain this information from the TMDL document or other information. When completed, this document will be a self-contained report independent of the TMDL document.		Significant Stakeholders Identify local governments, agricultural organizations or significant land holders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups with a major interest in this water body.					
TMDL ID (to be entered by EPD)		Name/Organization	Troup County				
Water body name	Flat Shoals Creek	Address	PO Box 1149				
HUC basin name	Flat Shoals Creek	City	LaGrange	State	GA	Zip	30241
HUC number	0313000210	Phone	706-883-1610			e-mail	
Primary county	Meriwether	Name/Organization	Harris County				
Secondary county	Troup	Address	PO Box 365				
Primary RDC	Chattahoochee-Flint	City	Hamilton	State	GA	Zip	31811
Secondary RDC	Lower Chattahoochee	Phone	706-628-4958			e-mail	
Water body location	Meriwether County	Name/Organization	Troup County Cattleman's Association				
	Troup County, Harris County	Address	207 N Lewis St				
Miles or area impacted	26	City	LaGrange	State	GA	Zip	30240
Parameter addressed in plan	Fecal coliform bacteria	Phone	706-882-5561			e-mail	
Water use classification	Fishing	Name/Organization	Meriwether County				
Degree of impairment	Partially supporting use <input type="checkbox"/>	Address	PO Box 428				
	Not supporting use <input checked="" type="checkbox"/>	City	Greenville	State	GA	Zip	30222
Date TMDL approved by EPA		Phone	706-672-1314			e-mail	
Impairment due to	Point sources <input type="checkbox"/>	Name/Organization	Troup County Health Department				
	Nonpoint sources <input checked="" type="checkbox"/>	Address	107 Medical				
	Both <input type="checkbox"/>	City	LaGrange	State	GA	Zip	30240
Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C		Phone	706-845-4085			e-mail	

Stakeholders continued on last page

SUMMARY OF ALLOCATION MODEL RESULTS FROM TMDL DOCUMENT (existing load, target TMDL, and needed reduction)

EXISTING LOAD	TARGET TMDL	NEEDED REDUCTION
297 cfu/100 ml	200 cfu/100 ml	97 cfu/100 ml

I. IDENTIFY NONPOINT SOURCE CATEGORIES AND SUBCATEGORIES OR INDIVIDUAL SOURCES WHICH MUST BE CONTROLLED TO IMPLEMENT LOAD ALLOCATIONS:

Major nonpoint sources contributing to impairment

SOURCE	DESCRIPTION OF CONTRIBUTION TO IMPAIRMENT	RECOMMENDED LOAD REDUCTION (FROM TMDL)
Agriculture or pasture land uses	100% contribution to the impairment. Important loads are associated with animal operations in which large quantities of fecal mater are generated or spread on fields. Loads may also be associated with the land application of municipal sludge.	40%

II. DESCRIBE ANY REGULATORY OR VOLUNTARY ACTIONS INCLUDING MANAGEMENT MEASURES OR OTHER CONTROLS BY GOVERNMENTS OR INDIVIDUALS THAT SPECIFICALLY APPLY TO THE POLLUTANT AND THE WATERBODY FOR WHICH THE TMDL WAS WRITTEN, THAT WILL BE ACCOMPLISHED THROUGH RELIABLE AND EFFECTIVE DELIVERY MECHANISMS, AND THAT WILL HELP ACHIEVE THE LOAD ALLOCATIONS IN THE TMDL:

A. Existing or required regulatory actions

RESPONSIBLE GOVERNMENT, ORGANIZATION OR ENTITY	NAME OF REGULATION/ORDINANCE	DESCRIPTION	ENACTED / PROJECTED DATE	STATUS
Meriwether County	Flood Hazard District	Regulates land use in flood hazard areas	05-00	Enforced
Troup County	Wetlands Protection District	Protects water quality. Restricts land use within wetlands	05-00	Enforced
Troup County	Groundwater Recharge Protection District	Regulates land use within district	05-00	Enforced
Troup County	Subdivision Regulations	Requires site plan and mitigation for erosion during construction	05-00	Enforced

B. Existing voluntary actions

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED / PROJECTED DATE	STATUS
Georgia Forestry Commission	BMP's for forestry	Disseminating information to interested individuals and organizations		Ongoing
Natural Resource Conservation Service	BMP's for agriculture	Disseminating information to interested individuals and organizations		Ongoing
Natural Resource Conservation Service	BMP's for Erosion and Sediment Control	Disseminating information to interested individuals and organizations		Ongoing
Georgia Soil & Water Conservation Commission	Consulting on BMPs	Disseminating information to interested individuals and organizations		Ongoing

C. Additional recommended regulatory or other measures which should be implemented to reduce the loads of the TMDL parameter

ENTITY/ORGANIZATION RESPONSIBLE	NAME OF PROPOSED REGULATION/ORDINANCE/ OTHER	DESCRIPTION	ENACTED / PROJECTED DATE	STATUS
Meriwether County	Amendment to Flood Hazard District	Include language " Land use practices shall not impair the drinking quality of the water as defined in the Federal Clean Drinking Water Act".		Under study
Meriwether County	NPDES Permit	Amend soil erosion and storm water ordinances to implement state NPDES requirements	08-00	Under review
Troup County	NPDES Permit	Amend soil erosion and storm water ordinances to implement state NPDES requirements	08-00	Under review
Harris County	NPDES Permit	Amend soil erosion and storm water ordinances to implement state NPDES requirements	08-00	Under review
Meriwether County	Amend Soil Erosion Ordinance	Include recommendations of the Erosion and Sedimentation Control Technical Study Committee (DIRT II)	06-02	Under review
Troup County	Amend Soil Erosion Ordinance	Include recommendations of the Erosion and Sedimentation Control Technical Study Committee (DIRT II)	06-02	Under review
Harris County	Amend Soil Erosion Ordinance	Include recommendations of the Erosion and Sedimentation Control Technical Study Committee (DIRT II)	06-02	Under review
Troup County Cooperative Extension Service	Nutrient Management Plans	Expand the program to include fecal coliform reduction	09-02	Under study
Meriwether County Cooperative Extension Service	Nutrient Management Plans	Expand the program to include fecal coliform reduction	09-02	Under study
Harris County Cooperative Extension Service	Nutrient Management Plans	Expand the program to include fecal coliform reduction	09-02	Under study

III. SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES OR OTHER CONTROL ACTIONS:

These must be implemented as expeditiously as practicable within five years of when the implementation plan is accepted by EPA.

IMPLEMENTATION ACTION*	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Form stakeholders group	X				
Organize implementation work with stakeholders and local officials to identify remedial measures and potential funding sources	X				
Identify sources of TMDL parameter	X				
Develop management programs to control runoff including identification and implementation of BMPs (Phase I):					
Agriculture	X				
Forestry					
Urban					
Mining					
Organize and implement education and outreach programs	X	X	X	X	X
Detect and eliminate illicit discharges	X	X	X	X	X
Evaluate additional management controls needed	X	X	X	X	X
Monitor and evaluate results	X	X	X	X	X
Reassess TMDL allocations		X	X	X	X
Provide periodic status reports on implementation of remedial activities	X	X	X	X	X
If needed, begin process for Phase II (next 5 years) and subsequent phases				X	X
* This schedule may be revised after meeting with the regional Water Issues Committee and stakeholders					

IV. PROJECTED ATTAINMENT DATE AND BASIS FOR THAT PROJECTION:

The projected attainment date is 10 years from acceptance of the implementation plan by EPA.

V. MEASURABLE MILESTONES:

- Number of management controls and activities already implemented 8
- Number of management controls and activities proposed in five-year work program 10
- Number of management controls and activities actually implemented in five-year work period _____(to be completed after 5 years)
- Stream sampled to identify areas of concern See monitoring plan

VI. MONITORING PLAN:

Monitoring data that placed stream on 303(d) list will be provided if requested.

Previous or current sampling activities or other surveys to detect sources or to measure effectiveness of management measures or other controls.

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
Meriwether County Dept of Health	2000-2005	Fecal coliform	Septic System Assessment	Ongoing
Troup County Department of Health	2000-2005	Fecal coliform	Septic System Assessment	Ongoing
Harris County Department of Health	2000-2005	Fecal coliform	Septic System Assessment	Ongoing

Planned or proposed sampling activities or other surveys.

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
EPD	2001	Multiple	Basin planning	On-going

VII. CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE:

- % concentration or load change (monitoring program)
- Categorical change in classification of the stream (delisting the stream is the goal)
- Regulatory controls or activities installed (ordinances, laws)
- Best management practices installed (agricultural, forestry, urban)

COMMENTS

Additional Stakeholders:

Meriwether County Department of Health, 51 Gay Connector, Greenville, GA 30222, 706-672-4974

Harris County Health Department, PO Box 265 Hamilton GA, 31811, 706628-5375